BATSE Observations of Cygnus X-1

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We report BATSE Earth-occultation observations of the low energy gamma-ray (20 keV - 1.5 MeV) emission of Cygnus X-1 covering the periods from 1991 May through 1992 February, and from early May to late June of 1993. During the latter period, we have detected a gradual decrease of the 45--140 keV flux from rough] y the γ2 level to the γ1(Harmon et al., IAU Circular 5813, 11 June 1993) seen previously by HEAO-3 in 1979-1980 (Ling et al., ApJ 321, 1,117, 1987). We report results of a search for possible spectral variations associated with the flux variations, an specifically for any evidence for enhanced emission in the 0.5 MeV to several MeV region which has been seen previously in Cygnus X-1 as well as other black hole candidates.

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